

MMSE RECEPTION OF DS-CDMA WITH TRANSMIT DIVERSITY

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Abstract of the Disclosure

A pilot signal enters a first MMSE receiver (201) and a second signal
 enters a second MMSE receiver (202). The first MMSE receiver (201) performs a
 channel estimate for the received pilot signal, determines a mean-square error of
 10 the pilot signal, and operates to minimize the mean-square error of the pilot
 estimate by constantly updating a weighting vector. An estimate of the pilot
 channel exits the first MMSE receiver (201). The MMSE weighting vector (206)
 is also fed into the second MMSE receiver (202) and is applied to the second
 channel. Symbol estimates (or in other embodiments, chip estimates) exit the
 15 second MMSE receiver (202) and enter channel circuitry (204), where normal
 channel processing occurs.